

### REMARKS

Claims 1-14, 16-25, 27-29, 31-42, 44-49, 51-62 and 64-66 are pending. Each of the independent claims 1, 23, 27, 31, 47 and 51 has been amended as described herein. Reconsideration is respectfully requested in light of the amendments and remarks made herein.

Before turning to the art rejections, applicants point out that the drawings have been amended as indicated above. No new matter has been added.

Regarding the art rejections, claims 1, 16, 17, 22, 23 and 27 have been rejected under 35 U.S.C. § 103(a) based on U.S. patent 6,385,602 to *Tso et al.* (*Tso*) in view of Japanese patent publication 11-149479 to *Sakae*. The remainder of the pending claims stand rejected under 35 U.S.C. § 103(a) on this base combination plus one or more additional references:

claim 2 further in view of U.S. patent 6,513,031 to *Fries et al.*;

claims 3-6, 24 and 28 further in view of *Fries et al.* and *Zamir et al.*, "Grouper: a dynamic clustering interface to Web search results," Computer Networks 31 (1999) 1361-1374;

claims 7, 13, 31, 32, 41, 44, 45, 47, 48, 51, 52, 61, 64 and 65 further in view of U.S. patent 6,415,282 to *Mukherjea et al.* (*Mukherjea*);

claims 8-12, 14, 20, 21, 25 and 29 further in view of U.S. patent 6,167,397 to *Jacobson et al.*;

claims 18 and 19 further in view of *Zamir et al.*;

claims 33-35 and 53-55 further in view of *Mukherjea* and *Zamir et al.*; and

claims 36-40, 42, 46, 49, 56-60, 62 and 66 further in view of *Mukherjea* and *Jacobson et al.*.

Applicants' invention of claims 1, 23 and 27, as amended herein, recites a clustering process/operation that categorizes acquired search results into a clustering result comprising a plurality of clusters, each of which contains an identifier and all search results assigned to that cluster. As each of these claims further specify, the identifiers are presented in a non-hierarchical arrangement,

as is a separate clustering result summary table which is generated. As further recited in each of these claims, the non-hierarchical summary table is output together with the clustering result such that all of the search results are displayed, each search result being displayed in one or more of the clusters. See, for example, Figs. 16 and 17 of applicants' application. *Tso* clearly does not disclose nor teach these features, as indicated by Figs. 3A-3C of *Tso* which illustrate the presentation of only the clustered search results; no summary is generated nor output. Applicants further submit that *Sakae* also fails to teach these features.

*Sakae* is directed to a method and device for displaying retrieved information in a hypermedia system. Figs. 3-5 of *Sakae* show the way in which such information is displayed. A hierarchal structure display is presented on one side of the screen while the candidate documents associated with only a selected one of the hierarchal branches are presented on the other side. This is different than applicants' claimed invention in a number of respects. Applicants' claimed invention does not employ a hierarchal structure with only limited search results displayed. Rather, applicants' claimed clustering result includes a group of identifiers arranged in a non-hierarchical fashion, each identifier being presented with its associated cluster of search results. All of the search results are displayed.

As a result of applicants' claimed arrangement, the user can see all of the search results in clustered form, that is, in clustered groups with each group being presented along with its associated identifier. The summary table is also viewable at the same time and can use the same identifiers as the clustering results. This advantageously enables the user to easily see both the overall structure of the clustering as well as all of the search results and to see which results were assigned to which clusters. Since the same search result may be assigned to different clusters, the user can also see which results have been cross-clustered.

Applicants' claimed arrangement greatly helps the user to find the desired information. In preferred embodiments, a variety of functions can be employed in connection with the summary table and the clustering results to enable the

user to view, for example, which cluster has the highest degree of importance in response to the keyword input by the user. Shifting between the summary table and the clustering results is also made easier with applicants' claimed arrangement. Even when shifting back and forth between these two forms of information, the user enjoys an efficient and comfortable operation, without having to endure the inconvenience of part of the search results being hidden or wondering which group of information to open next.

Thus, as the foregoing demonstrates, *Sakae* simply does not teach the features of applicants' claimed invention as discussed above, nor the advantages that flow from those features.

*Mukherjea*, which is used in combination with *Tso* and *Sakae* to reject independent claims 31, 47 and 51, is directed to a method of refining a query applied to a database of images. Applicants invention, as set forth in each of claims 31, 47 and 51, contain the same features as discussed with reference to claims 1, 23 and 27, but recited somewhat differently.

In each of claims 31, 47 and 51 at least one group of a plurality of digital items is acquired from at least one search of a database or network. Of the group(s) of items acquired, selected cluster-indexing information is extracted from each item in at least one of the groups. The selected cluster-indexing information comprises at least one of title, URL address, update date, and file size. The digital items in at least one of the groups is clustered, according to the selected cluster-indexing information, into a clustering result. The clustering result comprises a plurality of clusters, each having an identifier and the selected cluster-indexing information of all the search-acquired items assigned to that cluster, with the identifiers being presented in a non-hierarchical arrangement. A non-hierarchical clustering result summary table representing a summary of the cluster result is generated and is output together with the clustering result such that the selected cluster-indexing information of all of the search-acquired items are displayed, with each selected cluster-indexing information being displayed in one or more of the clusters. *Mukherjea* does not teach this arrangement, whether taken alone or in combination with *Tso* and/or *Sakae*.

None of the other cited references offset the deficiencies in the above-discussed references.

Accordingly, it is respectfully submitted that each of claims 1, 23, 27, 31, 47 and 51 is patentably distinguishable over the art of record. It is further submitted that each of the remaining dependent claims is patentable for at least the same reasons as its corresponding independent claim.

In view of the foregoing amendments and remarks, Applicants respectfully request favorable reconsideration of the present application.

Respectfully submitted,



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